whitish; a dusky spot at the end of the cell, and two dusky discal stripes parallel to the outer margin; a marginal row of blackish spots; outer border of male white, fringe white: body white, thorax greyish; abdomen of male with lateral dusky belts; antennæ with ferruginous pectinations. Below sordid white with a black spot closing each discoidal cell; a discal dusky stripe, forking in the male; this sex also with dusky subcostal and median longitudinal streaks; female with dusky marginal spots in the primaries. Expanse, 3 2 inches 1 line, 2 2 inches 8 lines.

Yokohama (Jonas).

[To be continued.]

LII.—Description of an apparently new Species of Hummingbird of the Genus Amazilia. By D. G. Elliot, F.R.S.E. &c.

## Amazilia lucida.

Adult. Crown of head dark metallic grass-green; upper surface shining grass-green, lighter than the head. Upper tail-coverts golden bronze. Throat, breast, abdomen, and flanks metallic grass-green, a light mouse-coloured spot on the lower part of the abdomen. Thighs white, feathers fluffy. Under tail-coverts dark bronzy brown, edged with white. Wings dark purple. Tail reddish bronze, darkest on the central portion of the feathers along the shafts, with the tips of the lateral rectrices bluish black, their edges reddish bronze. This bluish-black colour almost resolves itself into a subterminal bar, and is especially conspicuous on the underside of the tail. Bill apparently brownish red, perhaps flesh-colour in life, with a dark tip. Total length  $3\frac{1}{2}$  inches, wing  $2\frac{1}{8}$ , tail  $1\frac{1}{4}$ , culmen  $\frac{3}{4}$ .

Hab. Stated to be Columbia.

This seems to be a very distinct species, belonging to that section of the Amaziliæ to which Cabanis gave the generic term of Pyrrhophæna, and apparently comes nearest to the species generally known as P. Devillei, Bourc., but differs from it, and, indeed, from every other member of the genus Amazilia, by the coloration of the tail and its coverts. The crown resembles somewhat that of the bird called by Mr. Gould Erythronota Feliciæ; but there is no further resemblance between them save that, as with several others of these closely allied birds, the underparts are shining green. The genus Pyrrhophæna (in which possibly some would place this new

species) was proposed by Cabanis and Heine in the 'Museum Heineanum' (Th. iii. p. 35, 1860), without any characters to designate it having been given, to contain about half of those species originally placed in the genus Amazilia; and for the remaining portion the term Hemithylaca was instituted,—these names to be taken as substitutes for the less-classical ones of Amazilia, Erythronota, Saucerottia, &c., by which various species of this section of the Trochilidæ were generically known. With a tolerably large series of nearly all the known species of these so-called genera to judge from, I cannot satisfy myself that sufficient characters exist in any one of them to warrant its separation into a distinct generic rank from Amazilia, the term which was first proposed for them, and by which I prefer to call them. It is to be understood, however, that for generic characters, the style of coloration exhibited by any particular number of individuals, when unsupported by any differences of structure, is not taken into any consideration, since it would appear to be very apt to lead one into difficulties, as is clearly shown, I think, to be the case, judging from the unsuccessful efforts of those authors who have endeavoured to arrange these birds into different genera, whose characters were mainly those of colour.

I have not, therefore, adopted the *Pyrrhophæna* of MM. Cabanis and Heine, even in the restricted sense in which it has been employed by some ornithologists, deeming it a generic term not required to designate even that particular section of Humming-birds to which the new *Amazilia lucida* 

belongs.

## LIII.—Studies on Fossil Sponges.—I. Hexactinellida. By Karl Alfred Zittel.

[Continued from p. 273.]

## Personal Observations.

If it be possible to use the skeleton-spicules as the basis of a system, such a system ought most certainly to express most clearly the inherited peculiarities, and consequently the natural relationships of the Hexactinellida. If less attention has hitherto been paid by zoologists to precisely these true skeleton-spicules than to the flesh-spicules, this was evidently due to the uniformity in their skeletal structure possessed even by rather distant genera. In the flesh-spicules the differences